

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number  
**WO 2005/047157 A3**

(51) International Patent Classification<sup>7</sup>: **B66B 1/44**, 1/36

(21) International Application Number:  
PCT/FI2004/000668

(22) International Filing Date:  
10 November 2004 (10.11.2004)

(25) Filing Language: Finnish

(26) Publication Language: English

(30) Priority Data:  
20031647 12 November 2003 (12.11.2003) FI

(71) Applicant (for all designated States except US): **KONE CORPORATION** [FI/FI]; Kartanontie 1, FI-00330 Helsinki (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KATTAINEN, Ari** [FI/FI]; Tiilitehtaantie 9, FI-5830 Hyvinkää (FI). **SYRMAN, Timo** [FI/FI]; Pihalammentie 4, FI-05460 Hyvinkää (FI).

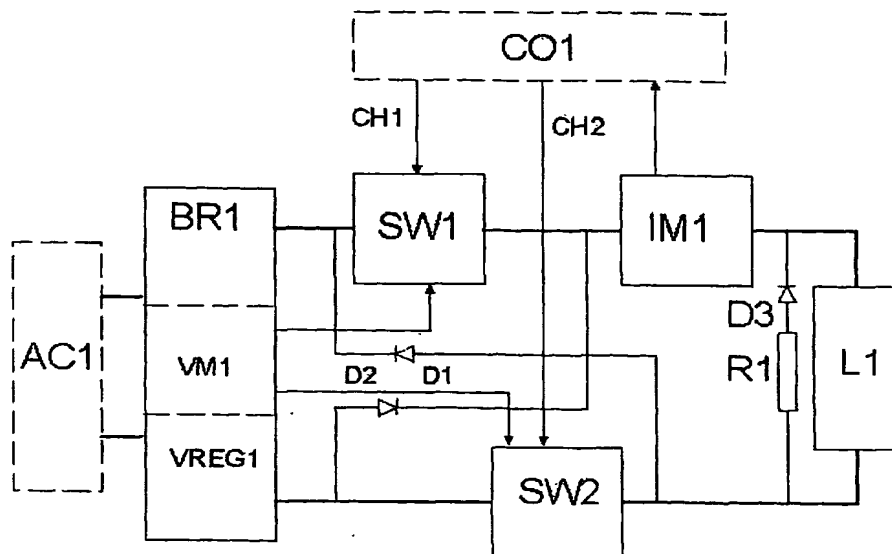
(74) Agent: **KONE CORPORATION/PATENT DEPARTMENT**; P.O. Box 677, FI-05801 Hyvinkää (FI).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ELEVATOR BRAKE AND BRAKE CONTROL CIRCUIT



(57) Abstract: A control circuit for controlling an electromechanical elevator brake, said control circuit comprising at least one brake coil (L1), a direct-voltage source (BR1), a semiconductor switch arrangement and a control unit (CO1) for controlling the circuit, and which circuit further comprises a current measuring unit (Im1) producing current data that can be passed to the control unit (CO1). The circuit comprises at least two semiconductor switches (SW1, SW2), and these can be controlled by the control unit (CO1) in an alternate manner such that the working condition of each switch can be checked in its turn on the basis of feedback data obtained from the current measurement.



**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**

21 July 2005